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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/905,703	04/19/2001	Brian R. Dershem	P7926/00-868	7105		
7590 10/05/2004			EXAM	EXAMINER		
Jason J. Stanley			ROSENBERO	ROSENBERG, LAURA B		
Caterpillar Inc.,	· ·					
Intellectual Property Department AB6490			ART UNIT	PAPER NUMBER		
100 N.E. Adams Street			3616			
Peoria, IL 61629-6490			DATE MAILED: 10/05/2004			

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Appli	cation No.	Applicant(s)	•			
		5,703	DERSHEM ET AL.				
Office Action Summary	Exam	iner	Art Unit				
		B Rosenberg	3616				
The MAILING DATE of this commo	ınication appears on	the cover sheet with the d	correspondence addr	ess			
A SHORTENED STATUTORY PERIOD THE MAILING DATE OF THIS COMMU - Extensions of time may be available under the provisic after SIX (6) MONTHS from the mailing date of this co - If the period for reply specified above, the maximum - Failure to reply within the set or extended period for re Any reply received by the Office later than three month earned patent term adjustment. See 37 CFR 1.704(b)	NICATION. ns of 37 CFR 1.136(a). In n mmunication. (30) days, a reply within the statutory period will apply a oly will, by statute, cause the s after the mailing date of th	e statutory minimum of thirty (30) day and will expire SIX (6) MONTHS from a application to become ABANDONE	nely filed s will be considered timely. the mailing date of this common (35 U.S.C. § 133).	munication.			
Status							
1) Responsive to communication(s) f	iled on <u>01 July</u> 2004	<u>1</u> .					
2a)☐ This action is FINAL . 2b)☒ This action is non-final.							
	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) ⊠ Claim(s) <u>15-36</u> is/are pending in the same state of the above claim(s) is 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>15-36</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to rest	are withdrawn from						
Application Papers							
9) The specification is objected to by 10) The drawing(s) filed on is/ar Applicant may not request that any ob Replacement drawing sheet(s) includi 11) The oath or declaration is objected	re: a) ☐ accepted o jection to the drawing ng the correction is re	(s) be held in abeyance. Se quired if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR	` '			
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review 3) Information Disclosure Statement(s) (PTO-1449 Paper No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate	52)			

DETAILED ACTION

1. This office action is in response to the amendment filed on 01 July 2004, in which claims 1-14 were canceled and claims 15-36 were added.

Claim Objections

Claims 19 and 30-36 are objected to because of the following informalities:
 "a right and left track assembly" should be changed to --right and left track
 assemblies-- (claim19, line 2);

the featured referred to as "at least one opening" and "at least one recessed opening" should be referred to consistently by the same phrase throughout claims 30-36.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claim 32 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The examiner is unsure what is being claimed in claim 32. Clarification and amendment of the claim is needed.

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Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 15-20, 22-28, and 30-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Shoup (4,151,920). In regards to claims 15, 25, 30, and 35, Shoup discloses a frame assembly (best seen in figure 1) for a loader machine having an undercarriage including at least one cross-member (including #60), the frame assembly comprising a main frame assembly (#10) having a base portion (including parts of #18) and front and rear sections (right side in figure 1 is front; left side in figure 1 is rear), and at least one recessed channel (#56) defined on the base portion of the main frame assembly that extends across the width of the base portion for seating upon the at least one cross-member (best seen in figure 1) in a manner that distributes a vertical load of the loader machine substantially evenly along the at least one cross-member (based on the channel's location across the entire width of the frame).

In regards to claims 16, 26, and 33, Shoup discloses the at least one crossmember (#60) is attached with the main frame assembly in an area adjacent the at least one recessed channel (best seen in figure 1).

In regards to claims 17, 27, 31, and 34, Shoup discloses the at least one recessed channel (#56) being positioned between the front and rear sections of the

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main frame assembly and extending across the entire width of the base portion (figure 1).

In regards to claims 18 and 28, Shoup discloses the main frame assembly including an upper frame assembly (including #14, 16) having a pair of "space tower assemblies" ("tallest" portions of #16), a pair of side members (#16) having front (to the right) and rear (to the left) portions with each side member being connected to a respective one of the pair of tower assemblies (integral with them) and extending longitudinally therefrom, and a cross-member assembly (#14) extending between the pair of tower assemblies for connection therewith, and a lower frame assembly (including #18) having a pair of spaced vertically oriented side rails (#18) and a front wall (including #78) extending continuously between the side rails for connection therewith, the upper frame assembly being mounted to the lower frame assembly exclusively at a connection between the side members of the upper frame assembly and rte respective side rails of the lower frame assembly (at weld joint #30).

In regards to claims 19 and 25, Shoup discloses the undercarriage being a tracked undercarriage including right and left tracked assemblies being connected by the at least one cross-member (column 3, lines 28-35).

In regards to claim 20, Shoup discloses the at least one recessed channel (#56), based on its location across the width of the frame and its connection to the side frame members, defining a strengthened region of the main frame assembly and being operable to provide torsional stiffness to the loader machine.

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In regards to claim 22, Shoup discloses the lower frame assembly further including the base portion and the at least one recessed channel (figure 1).

In regards to claim 23, Shoup discloses the cross-member assembly (#14) being disposed between the front and rear end portions of the upper frame assembly (figure 1; front end portion to the right, rear end portion to the left).

In regards to claim 24, Shoup discloses the side members (#16) of the upper frame assembly extending along the side rails (#18) of the lower frame assembly a predetermined distance (along #30) and terminating rearward of the front wall (#78).

In regards to claim 32, to the best of the examiner's understanding, Shoup discloses the loader machine having a center of gravity that is measured in relation to the depth of the at least one recessed opening and the among of the at least one cross-member disposed within the at least one recessed opening. Specifically, the center of gravity can be measured with respect to any desired location of a vehicle.

In regards to claim 36, Shoup discloses the at least one recessed opening (#56) and the at least one cross-member (#60) having a channel shape formed for mating relation with each other (best seen in figure 1).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

⁽a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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8. Claims 21 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoup (4,151,920) in view of Macht (4,514,007). In regards to claims 21 and 29, Shoup does not disclose the material used for manufacturing the lower frame assembly. Macht teaches a frame assembly (best seen in figure 2) for a loader machine (#10) having an undercarriage including at least one cross-member (#74,76), the frame assembly comprising a main frame assembly (#12) and at least one recessed channel (not labeled; best seen in figure 2) for seating upon the at least one cross-member. The frame assembly is formed of steel (column 4, lines 2-4). It would have been obvious to one skilled in the art at the time that the invention was made to modify the lower frame assembly of Shoup such that it comprised a medium strength steel as claimed in view of the teachings of Macht so as to provide a strong, resilient, and inexpensive material for manufacturing the lower frame assembly. Further, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Response to Arguments

9. Applicant's arguments with respect to claims 15-36 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Johnston et al. disclose a frame for a track-type vehicle including

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a recessed channel for a cross-member. Blehert et al. disclose a frame for a utility

vehicle including a recessed channel for a cross-member. Anderson et al. disclose a

frame for a loader.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Laura B Rosenberg whose telephone number is (703)

305-3135. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Paul Dickson can be reached on (703) 308-2089. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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Paula B. Loserburg Laura B Rosenberg Patent Examiner

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LBR

PAUL N. DICKSON

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